

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

Claims 1-99 (canceled)

Claim 100. (canceled) The DNA construct designated pETB2360210.

Claim 101. (Currently amended) An isolated and purified superantigen toxin DNA fragment encoding Staphylococcal enterotoxin B (SEB) in which at least ~~one amino acid~~ two of the following ranges of amino acid positions of SEB have each been altered at one amino acid: [[of]] the range of amino [[acid]] acids located at positions 40-50, of SEB and at least one amino acid selected from the group consisting of amino acid positions the range of amino acids located at positions 18-28, the range of amino acids located at positions 55-65, the range of amino acids located at positions 62-72, the range of amino acids located at positions 84-94, the range of amino acids located at positions 86-96, the range of amino acids located at positions 89-99, the range of amino acids located at positions 110-120 and the range of amino acids located at positions 205-215, wherein the altered amino acids of SEB have been altered such that binding of said encoded SEB to the MHC class II receptor and T cell antigen receptor is altered.

Claim 102. (Currently amended) The DNA fragment of claim 101, which encodes SEB in which the ranges of amino acids located at [[in]] positions 40-50, 84-89 and 89-99 have each been altered at one amino acid.

Claim 103. (Previously presented) A recombinant DNA construct comprising:
(i) a vector, and
(ii) an isolated and purified altered superantigen toxin DNA fragment according to claim 101.

Claim 104. (Currently amended) [[A]] An isolated host cell transformed with the recombinant DNA construct according to claim 103.

Claim 105. (Previously presented) A host cell according to claim 104, wherein said cell is prokaryotic.

Claim 106. (Previously presented) A method for producing altered superantigen toxin comprising culturing the cells according to claim 104, under conditions such that said DNA fragment is expressed and said superantigen toxin is thereby produced, and isolating said superantigen toxin.

Claim 107. (Currently amended) The superantigen toxin DNA fragment according to claim 101, wherein an amino acid is altered within the range of amino acids located at ~~the at least one amino acid includes amino acid~~ positions 18-28.

Claim 108. (Currently amended) The superantigen toxin DNA fragment according to claim 101, wherein an amino acid is altered within the range of amino acids located at ~~the at least one amino acid includes amino acid~~ positions 55-65.

Claim 109. (Currently amended) The superantigen toxin DNA fragment according to claim 101, wherein an amino acid is altered within the range of amino acids located at ~~the at least one amino acid includes amino acid~~ positions 62-72.

Claim 110. (Currently amended) The superantigen toxin DNA fragment according to claim 101, wherein an amino acid is altered within the range of amino acids located at ~~the at least one amino acid includes amino acid~~ positions 84-94.

Claim 111. (Currently amended) The superantigen toxin DNA fragment according to claim 101, wherein an amino acid is altered within the range of amino acids located at ~~the at least one amino acid includes amino acid~~ positions 86-96.

Claim 112. (Currently amended) The superantigen toxin DNA fragment according to claim 101, wherein an amino acid is altered within the range of amino acids located at ~~the at least one amino acid includes amino acid~~ positions 89-99.

Claim 113. (Currently amended) The superantigen toxin DNA fragment according to claim 101, wherein an amino acid is altered within the range of amino acids located at ~~the at least one amino acid includes amino acid~~ positions 110-120.

Claim 114. (Currently amended) The superantigen toxin DNA fragment according to claim 101, wherein an amino acid is altered within the range of amino acids located at ~~the at least one amino acid includes amino acid~~ positions 205-215.

Claim 115. (New) The superantigen toxin DNA fragment according to claim 101, wherein an amino acid is altered within the range of amino acids located at positions 40-50.